

APPENDIX A: STATE NATURAL AREAS (SNAs)



APPENDICES

PESHTIGO RIVER MASTER PLAN DESIGNATION PROCESS FOR STATE NATURAL AREAS

Generally, natural areas are tracts of land or water harboring natural features that have escaped most human disturbance and that represent the diversity of Wisconsin's native landscape. They contain outstanding examples of native biotic communities and are often the last refuges in the state for rare and endangered plant and animal species. State Natural Areas may also contain exceptional geological or archaeological features. The finest of the state's natural areas are formally designated as State Natural Areas. The Wisconsin State Natural Areas Program oversees the establishment of SNAs and is advised by the Natural Areas Preservation Council. The stated goal of the program is to locate, establish, and preserve a system of SNAs that as nearly as possible represents the wealth and variety of Wisconsin's native landscape for education, research, and to secure the long-term protection of Wisconsin's biological diversity for future generations. SNAs are unique in state government's land protection efforts, because they can serve as stand alone properties or they can be designated on other properties, such as a State Forest. By designating SNAs within the boundary of the Peshtigo River State Forest, we are helping to accomplish two different, legislatively mandated Department goals. This arrangement makes abundant fiscal sense because the state does not have to seek out willing sellers of private lands to meet the goals of multiple Department programs. This avoids duplicating appraisal and negotiation work and provides dual use of land that is already in public ownership.

The process to establish a SNA begins with the evaluation of a site identified through field inventories conducted by DNR ecologists including the Biotic Inventory and Regional Analysis. Assessments take into account a site's overall quality and diversity, extent of past disturbance, long-term viability, context within the greater landscape, and rarity of features on local and global scales. Sites are considered for potential SNA designation in one or more of the following categories:

- Outstanding natural community
- Critical habitat for rare species
- Ecological reference (benchmark) area
- Significant geological or archaeological feature
- Exceptional site for natural area research and education

DESIGNATION PROCESS OF SNAS

Step 1: Results from the Biotic Inventory were used to decide which areas would have special management prescriptions. The data gathered for the Biotic Inventory identifies and evaluates the natural communities, significant plant and animal populations, and selected aquatic features and their associated biotic communities. This report emphasized important protection, management, and restoration opportunities, focusing on both unique and representative natural features of the Peshtigo River property and surrounding landscape.

Step 2: Using both the Biotic Inventory and the Peshtigo River Preferred Alternative, the team took sites ranked high to moderate, or having a good potential for special management or other unique biological resources and created Native Community Management Areas.

Step 3: After public review of the preferred alternative, these identified sites were modified and the land classification was carried onto the Master Plan.

Step 4: The last step in the process involved the SNA program staff in the Bureau of Endangered Resources and Peshtigo River master plan team which incorporates experts from many different programs. After the SNA ecologists developed the list of SNA opportunities it was given to the master plan team to evaluate. The sites were compared the ecological gap analysis of the SNA system. Then, the sites were compared to the previously agreed management proposals for the forest. Thus, if the plant and animal species that made up the site were good representatives of a native community, filled a gap in the SNA system, and the intended management for the

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native community did not conflict, it was considered a good candidate.

Once approved by the Natural Resources Board, sites are formally “designated” as SNAs and become part of the Wisconsin State Natural Areas system. Designation confers a significant level of recognition of these sites natural values through state statutes, administrative rules, and guidelines

IMPACT TO MASTER PLAN PROCESS

The process for selecting and designating SNAs is determined by cooperative efforts between two programs within the DNR: The Division of Forestry and the Bureau of Endangered Resources. The master planning process for State Forests requires that the goals set by the Division of Forestry be considered before the Bureau of Endangered Resources submits candidate sites for SNA designation. This is done so that all sites are evaluated for timber production, which is outlined as a Division of Forestry priority. As a result, SNAs are considered overlays to Land Management Areas. The same piece of land can achieve the goals of two different Department programs. Management activities for each SNA reflect the general management prescriptions planned for the area in which the SNA is located. For example, an SNA located within an area managed for hemlock hardwoods, will follow the hemlock hardwoods management objective, rather than a separate SNA management plan. The exact same timber management would occur with or without SNA designation.

SNA MANAGEMENT ACTIVITIES

State Natural Areas are not exclusively passive management. Within the past five years, over 200 SNAs all over Wisconsin have had some type of active management. Examples of management activities include exotic species removal, burning and fuel reduction, brushing, trail development, ditch filling and planting. Timber harvesting is not a primary focus of an SNA, but it is often necessary to achieve the desired ecological goals of a specific habitat. Regardless of any designation, wildfires on state forests would be actively suppressed, safety measures would occur in developed areas and insect and disease outbreaks would be considered for control.

RECREATIONAL IMPACTS

Impacts would be minimal because the recreation opportunities for any given area were determined before consideration as an SNA. State Natural Areas are not appropriate for intensive recreation and such areas were automatically ruled out as potential sites. However, SNAs can accommodate low-impact activities such as hiking, bird watching, and nature study. Examples of existing facilities within SNA sites include remote and canoe campsites (limited facilities), hiking and cross-country ski trails, boat landings and ramps, snowmobile trails, and a paved bike trail. Most areas have walk-in or water access

only. To comply with the SNA designation, existing trails may need to be rerouted to better protect sensitive areas, for safety reasons, for fire control access, or if it enters into a wetland area. Disabled access would be accommodated at sites with existing trails and roads.

BENEFITS FOR A PARTNERSHIP BETWEEN STATE FORESTS AND THE STATE NATURAL AREAS PROGRAM

The SNA program has standardized methods for conducting long-term monitoring of ecosystems and also has a network with a broad range of researchers, from aquatic biologists and botanists to zoologists that can be encouraged to conduct research on the state forest to enhance our understanding of the Peshtigo River ecosystem. The experts in the Division of Forestry have experience in monitoring the trees and other plants, while SNA ecologists have expertise in monitoring aquatic flora and fauna, terrestrial invertebrates, fungi and lichens, ground layer plants, mammals, reptiles and amphibians, and birds. Together an exceptional collaborative monitoring program could be developed.

- The SNA program can bring a broad range of educators together to assist in understanding and interpreting the ecology of the Peshtigo River.
- The SNA Program can lend its expertise to help create ecological interpretive signs and trail guides for better understanding of the full range of biological diversity on the Peshtigo River.
- The SNA Program can assist in conducting land management activities such as invasive exotic species control, brushing and conducting prescribed burns.
- The Division of Forestry would not lose any of its management or decision-making authority, but gain the ability to provide a broader range of opportunities that would help fill its mission by collaborating with the SNA Program.

An outside forest certification audit of the State Forest Program concluded that cooperation between the Division of Forestry and the State Natural Areas Program was commendable. This cooperation should continue to maintain such a high rating by future auditors.

With a joint consideration, the same piece of land can achieve the goals of two different programs. If there were a lack of teamwork, the SNA Program would still pursue sites to fulfill its goals. Such a venture could duplicate an additional 675 acres of land with a cost of \$2,000,000 or more to the state of Wisconsin. Cooperation makes abundant fiscal sense.

APPENDIX B: SCIENTIFIC AND COMMON NAMES USED IN THE PESHTIGO RIVER STATE FOREST MASTER PLAN AND EA

SCIENTIFIC NAME	COMMON NAME
TREES AND SHRUBS	
<i>Abies balsamea</i>	balsam fir
<i>Acer saccharum</i>	sugar maple
<i>Acer rubrum</i>	red maple
<i>Alnus spp</i>	alder
<i>Amelanchier spp.</i>	Juneberry
<i>Betula alleghenensis</i>	yellow birch
<i>Betula papyrifera</i>	paper or white birch
<i>Corylus spp.</i>	hazel
<i>Diervilla lonicera</i>	bush honeysuckle
<i>Fagus grandifolia</i>	American beech
<i>Fraxinus americana</i>	white ash
<i>Fraxinus nigra</i>	black ash
<i>Hamamelis virginiana</i>	witch hazel
<i>Larix laricina</i>	Tamarack
<i>Picea mariana</i>	black spruce
<i>Pinus banksiana</i>	Jack pine
<i>Pinus resinosa</i>	red pine
<i>Pinus strobus</i>	white pine
<i>Populus tremuloides</i>	quaking aspen
<i>Prunus virginiana</i>	chokecherry
<i>Quercus alba</i>	white oak
<i>Quercus ellipsoidalis</i>	northern pin, Hill's, or scrub oak
<i>Rubus idaeus</i>	raspberry
<i>Rubus occidentalis</i>	blackberry
<i>Thuja occidentalis</i>	northern white cedar
<i>Tilia americana</i>	basswood
<i>Tsuga canadensis</i>	hemlock
<i>Ulmus americana</i>	American elm
<i>Vaccinium angustifolium</i>	blueberry
<i>Viburnum acerifolium</i>	maple-leaved viburnum
HERBS AND FORBS	
<i>Amphicarpaea bracteata</i>	hog peanut
<i>Anemone quinquefolia</i>	wood anemone
<i>Apocynum androsaemifolium</i>	spreading dogbane
<i>Aralia nudicaulis</i>	sarsaparilla
<i>Aster macrophyllus</i>	large-leaved aster
<i>Comptonia peregrina</i>	sweet fern

SCIENTIFIC NAME	COMMON NAME
HERBS AND FORBS	
<i>Fragaria vesca</i>	wild strawberry
<i>Gaultheria procumbens</i>	wintergreen
<i>Hepatica americana</i>	round-lobed hepatica
<i>Lysimachia quadrifolia</i>	whorled loosestrife
<i>Lythrum salicaria</i>	purple loosestrife
<i>MaiAnthemum canadensis</i>	wild lily-of-the-valley
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil
<i>Polygonatum pubescens</i>	hairy Solomon's seal
<i>Pteridium aquilinum</i>	bracken fern
<i>Smilacina racemosa</i>	false Solomon's seal
<i>Trientalis borealis</i>	starflower
<i>Trillium grandiflorum</i>	trillium
MAMMALS	
<i>Canis lupus</i>	gray wolf
<i>Canis lupus lycaon</i>	timber wolf
<i>Glaucomys sabrinus</i>	northern flying squirrel
<i>Napaeozapus insignis</i>	woodland jumping mouse
<i>Sorex palustris</i>	water shrew
BIRDS	
<i>Accipiter gentilis</i>	northern goshawk
<i>Antrostomus vociferous</i>	whip-poor-will
<i>Buteo lineatus</i>	red-shouldered hawk
<i>Catharus fuscescens</i>	veery
<i>Empidonax minimus</i>	least flycatcher
<i>Haliaeetus leucocephalus</i>	bald eagle
<i>Pandion haliaetus</i>	osprey
<i>Tringa solitaria</i>	solitary sandpiper
<i>Vermivora chrysoptera</i>	golden-winged warbler
<i>Wilsonia canadensis</i>	Canada warbler
FISH AND AQUATIC ORGANISMS	
<i>Ambloplites rupestris</i>	rock bass
<i>Catostomus commersonii</i>	white sucker
<i>Dreissena polymorpha</i>	zebra mussel
<i>Esox lucius</i>	northern pike
<i>Esox masquinongy</i>	muskellunge

APPENDIX B: SCIENTIFIC AND COMMON NAMES USED IN THE PESHTIGO RIVER STATE FOREST MASTER PLAN AND EA

SCIENTIFIC NAME	COMMON NAME
FISH AND AQUATIC ORGANISMS	
<i>Lepomis gibbosus</i>	pumpkinseed
<i>Lepomis macrochirus</i>	bluegill
<i>Micropterus dolomieu</i>	smallmouth bass
<i>Micropterus salmoides</i>	largemouth bass
<i>Morone americana</i>	white perch
<i>Neogobius melanostomus</i>	round goby
<i>Oncorhynchus mykiss</i>	rainbow trout
<i>Oronectes propinquus</i>	northern Clearwater crayfish
<i>Perca falvescens</i>	yellow perch
<i>Pomoxis nigromaculatus</i>	black crappie
<i>Salmo trutta</i>	brown trout
<i>Sander vitreus vitreus</i>	walleye
REPTILES AND AMPHIBIANS	
<i>Clemmys insculpta</i>	wood turtle
<i>Emydoidea blandingi</i>	Blanding's turtle
<i>Hemidactylium scutatum</i>	four-toed salamander
<i>Lithobates palustris</i>	pickerel frog
<i>Necturus maculosus</i>	mudpuppy
<i>Rana catesbeiana</i>	bull frog
<i>Rana septentrionalis</i>	mink frog
INSECTS	
<i>Cicindela patruela patruela</i>	tiger beetle
<i>Gomphurus lineatifrons</i>	splendid clubtail
<i>Gomphurus ventricosus</i>	skillet clubtail
<i>Gomphus quadricolor</i>	rapids clubtail
<i>Gomphus viridifrons</i>	green-faced clubtail
<i>Lymantria dispar</i>	gypsy moth
<i>Nesiaeschna pentacantha</i>	Cyrano darner
<i>Neurocordulia yamaskanensis</i>	Stygian shadowfly
<i>Ophiogomphus anomalus</i>	extra-striped snaketail
<i>Ophiogomphus carolus</i>	rifle snaketail
<i>Ophiogomphus howei</i>	pygmy snaketail

APPENDIX C: SPECIES OF SPECIAL CONCERN, WISCONSIN STATE THREATENED AND WISCONSIN STATE ENDANGERED SPECIES WITHIN THE PESHTIGO RIVER STATE FOREST

NHI WORKING LIST PLANTS IN PESHTIGO RIVER STATE FOREST AND SURROUNDING AREA

SCIENTIFIC NAME	COMMON NAME		YEAR	STATE RANK	GLOBAL RANK	STATE STATUS
<i>Arabis missouriensis</i> var. <i>deamii</i>	Deam's Rockcress		2003	S2	G4G5QT3?Q	SC
<i>Arethusa bulbosa</i>	Swamp-pink	*	1991	S3	G4	SC
<i>Asclepias ovalifolia</i>	Dwarf Milkweed		2003	S3	G5?	THR
<i>Carex assiniboinensis</i> **	Assiniboine Sedge	*	1981	S3	G4G5	SC
<i>Carex vaginata</i>	Sheathed Sedge	*	2003	S3	G5	SC
<i>Cypripedium reginae</i>	Showy Lady's-slipper	*	2003	S3	G4	SC
<i>Epilobium palustre</i> **	Marsh Willow-herb	*	2003	S3	G5	SC
<i>Malaxis monophyllos</i> var. <i>brachypoda</i>	White Adder's-mouth	*	1992	S3	G4Q	SC
<i>Medeola virginiana</i>	Indian Cucumber-root		1997	S3	G5	SC
<i>Platanthera hookeri</i> **	Hooker Orchis		1960	S2S3	G5	SC
<i>Platanthera orbiculata</i>	Large Roundleaf Orchid		2003	S3	G5?	SC
<i>Vaccinium pallidum</i>	Blue Ridge Blueberry		2003	S1	G5	SC

* Species associated with wetlands or aquatic features

** Species not located within the Peshtigo River State Forest

APPENDIX C: SPECIES OF SPECIAL CONCERN, WISCONSIN STATE THREATENED AND WISCONSIN STATE ENDANGERED SPECIES WITHIN THE PESHTIGO RIVER STATE FOREST

NATURAL HERITAGE INVENTORY WORKING LIST ANIMALS FOUND IN THE PESHTIGO RIVER STATE FOREST AND ADJACENT AREAS

SCIENTIFIC NAME	COMMON NAME		YEAR	STATE RANK	GLOBAL RANK	STATE STATUS	FEDERAL STATUS
BEETLE							
<i>Cicindela patruela patruela</i> **	A Tiger Beetle		2002	S2	G3T3	SC/N	
BIRD							
<i>Accipiter gentiles</i>	Northern Goshawk		2002	S2B,S2N	G5	SC/M	
<i>Haliaeetus leucocephalus</i>	Bald Eagle	*	2002	S3B	G4	SC/FL	LT, PD
<i>Pandion haliaetus</i>	Osprey	*		S3S4B	G5	Thr	
BUTTERFLY							
<i>Pieris virginiensis</i> **	West Virginia White	*	2002	S3	G3G4	SC/N	
CRUSTACEAN							
<i>Oronectes propinquus</i>	Northern Clearwater Crayfish	*			SUG5	SC/N	
DRAGONFLY							
<i>Gomphurus lineatifrons</i>	Splendid Clubtail	*	1991	S3	G4	SC/N	
<i>Gomphurus ventricosus</i> **	Skillet Clubtail	*	2002	S3	G3	SC/N	
<i>Gomphus quadricolor</i>	Rapids Clubtail	*		S4	G3G4	SC/N	
<i>Gomphus viridifrons</i>	Green-faced Clubtail	*		S3	G3	SC/N	
<i>Nasiaeschna pentacantha</i>	Cyrano Darner	*	1988	S3	G5	SC/N	
<i>Neurocordulia yamaskanensis</i>	Stygian Shawdowfly	*		S3	G5	SC/N	
<i>Ophiogomphus anomalus</i>	Extra-striped Snaketail	*		S1	G3	END	
<i>Ophiogomphus carolus</i>	Riffle Snaketail	*	1980	S3	G5	SC/N	
<i>Ophiogomphus howei</i>	Pygmy Snaketial	*		S3	G3	THR	
FROG							
<i>Rana catesbeiana</i>	Bullfrog	*	2003	S3	G5	SC/H	
SALAMANDER							
<i>Hemidactylium scutatum</i> **	Four-toed Salamander	*	2003	S3	G5	SC/H	
TURTLE							
<i>Clemmys insculpta</i>	Wood Turtle	*	2003	S3	G4	THR	
<i>Emydoidea blandingii</i> **	Blanding's Turtle	*	2002	S3	G4	THR	

* Species associated with wetlands or aquatic features.

** Species not located within the Peshtigo River State Forest.

APPENDIX D: GLOSSARY OF TERMS

Adaptive Management: A dynamic approach to forest management in which the effects of treatments and decisions are continually monitored and used, along with research results, to modify management on a continuing basis to ensure that objectives are being met.

Basal Area: The basal area of a tree is usually defined as the cross-sectional area at breast height in square feet.

Biological Diversity: The variety and abundance of species, their genetic composition, and the communities, ecosystems and landscapes in which they occur. Biological diversity also refers to the variety of ecological structures, functions, and processes at any of these levels.

Community Restoration: recognizes that communities, species, structural features, microhabitats, and natural processes that are now diminished or absent from the present landscape have a valuable role to play in maintaining native ecosystems. Under some definitions, community restoration means moving the current composition and structure of a plant community to a composition and structure that more closely resembles that of the pre-settlement vegetation.

Drumlins: Glacier features formed by erosion and deposition of materials beneath the glacier.

Eskers: Ridges composed of sand and gravel that were deposited by streams which flowed beneath the glacier.

Extended Rotation Stands: can be either even or uneven aged. They are managed well beyond the economic rotation to capture ecological benefits associated with mature forests. These stands are carried beyond their normal economic rotation age and are harvested before reaching pathological decline.

Forest Cover Type: A category of forest usually defined by its vegetation, particularly its dominant vegetation as based on percentage cover of trees.

Forest Structure: Forest stands can be characterized by their structural features, including type and density of dominant tree species, type of understory (ground vegetation), and amount of standing and fallen dead trees. These attributes undergo a predictable pattern of change as stands age, and together they can be used to classify stands into young, mature, and old stages.

Invasive Species: These species have the ability to invade natural systems and proliferate, often dominating a community to the detriment and sometimes the exclusion of native

species. Invasive species can alter natural ecological processes by reducing the interactions of many species to the interaction of only a few species.

Moraines: Ridges of sediment that accumulated along the margin of the glacier as the glacier stood in place for a long period of time.

Outwash plains: Are formed by meltwater rivers that flowed beyond the margin of the glacier and deposited sandy and gravelly sediment. When the ice melted, the sand and gravel collapsed to form an irregular surface that typically contains many closed depressions known as kettles.

Passive management: means the goals of the native community management area are achieved primarily without any direct action. Nature is allowed to determine the composition and structure of the area. For example, patches of large woody debris and the accompanying root boles (tip-up mounds) that are characteristic of old-growth structure are best achieved through natural processes. Passive management, however, does not mean a totally hands off approach. Some actions are required by law, such as wildfire suppression, consideration of actions when severe insect and disease outbreaks affects trees, and hazard management of trees along trails and roads. Other actions, such as removal of invasive exotic species, are necessary to maintain the ecological integrity of the site.

Relict Forests: are stands that appear to have never been manipulated or disturbed by humans of European descent. Some presettlement forest ecosystem conditions have been perpetuated. Ancient forest, a sub-category, is relict forest with the presence of some old, biologically mature trees. Very few relict forests still exist in Wisconsin.

Sustainable Forestry: The practice of managing dynamic forest ecosystems to provide ecological, economic, social, and cultural benefits for present and future generations.

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APPENDIX F: GUIDANCE FOR ALL-TERRAIN VEHICLE USE ON DEPARTMENT LANDS

Wisconsin DNR January 1, 2005

1. INTRODUCTION

There is a growing demand for ATV use on Department lands. Because unauthorized ATV use and inappropriate siting can have adverse impacts on natural resources and other property users, requests for ATV use on Department lands should be evaluated using the process and criteria specified below.

It is not the intent of this guidance to direct property managers to evaluate all department properties to determine if ATV trails are suitable on those properties. The purpose is to provide criteria based decision-making model in the event that an ATV trail is planned for a property. This guidance is intended to assist Department staff in evaluating requests for ATV trails on Department owned or managed lands. The department will review each trail proposals on a case by case basis and is not obligated to establish an ATV trail in every case.

2. WHERE ATV'S MAY BE AUTHORIZED

All-terrain vehicle (ATV) use is permitted on Department lands only:

- a) By permit for persons with disabilities as a mode of personal conveyance. Permits can be obtained on a case-by-case basis per the procedure and restrictions in MC 2527.7
- b) As a designated use by posted notice (s. NR45.05(3) Wis. Adm. Code), authorized by approved plan, in the following situations:
 - A connector trail leading to a local or regional trail system under county or municipal management.
 - On a linear State Trail. Linear State Trails may be state or cooperatively managed.
 - A loop trail on a property in those limited situations where the size and configuration of that property can accommodate ATV use that is in compliance with the criteria outlined below.
 - Within an intensive use area on lands purchased for that specific purpose, or on lands no longer necessary for conservation purposes, that will be operated under a lease agreement.

3. GENERAL GUIDELINES FOR DESIGNING, SITING, AND MAINTAINING TRAILS

The goal of the Department regarding all trails is to design, site, and maintain trails that provide a quality experience for the user and which are sustainable.

Sustainable trails:

- a) Are ecologically sustainable—they minimize ecological impacts of trails.
- b) Are physically sustainable—they are created to retain their shape throughout time without abrupt change by accommodating the human and natural forces acting upon them. Routine maintenance may be necessary periodically.
- c) Are social/economically sustainable --Are accepted and/or substantially supported by affected parties.

These principles should be an integral part of decision-making for any trail or trail use. One result of developing sustainable trails is that the trail experience may foster a sense of stewardship, i.e. a desire by the user to sustain the trails and the land that supports them, in the user.

4. ATV TRAILS

ATV trails, like all Department trails should be considered within the context of sustainability (see above). All trails have ecological impacts, yet we try to stay within the site-specific capability of each location to accommodate the trail. Although the wear surface of natural-surface trails continually changes, attempts must be made to design trails that can remain relatively stable with appropriate management and maintenance.

ATV use on Department lands should be authorized as part of a comprehensive property master planning process so that the location of ATV use can be considered with both existing and potential future uses of the property. If ATV use is being considered for properties that have an existing master plan, the use would have to be authorized through a plan amendment or variance process. There will also be times that there will be legitimate requests (e.g., critical linkages with trail systems, cooperative State Trails) that will have to be carefully evaluated on properties where no master plan exists. Regardless of whether a master plan exists, an evaluation of the impacts on the resources and public input is essential components of the process.

5. CRITERIA FOR EVALUATING ATV USE ON DEPARTMENT LANDS

This document contains a list of criteria that should be addressed when evaluating proposals for ATV use on Department property. In some cases, analysis of one (such as property designation, potential effects on the resources, etc.), or more, of the criteria will result in a determination by

APPENDIX F: GUIDANCE FOR ALL-TERRAIN VEHICLE USE ON DEPARTMENT LANDS

the Department that the proposed ATV use is not feasible. However, in order for ATV use to be approved, all of the criteria below should be evaluated following the procedure explained on Page five. Use the form on page six of this guidance to address the criteria.

a) Property Designation/Funding Source

New trails must be compatible with the existing setting and uses of a property, including its statutory designation, deed restrictions or covenants, and any restrictions/purposes related to the funding source used to purchase or manage the property such as any restrictions that may be associated from federal (e.g. PR, DJ, ORAP, LAWCON, TE) funding.

Using the criteria contained in this document, State Natural Areas, State Parks, Wild Rivers properties, and State Ice Age and North Country Trail Areas will generally not be suitable for ATV use. On these properties, ATV use will only be considered by exception (Secretary sign-off) and will generally be restricted to a select few larger properties where the trail siting criteria can be met. Requests for trails on other property types will be reviewed on a case by case basis. Other property types (e.g. Wildlife Areas, Fishery Areas) may have limited potential for ATV trail connectors due to existing use patterns, existing stipulations and restrictions that would not allow for uses that would interfere with the purpose that the property was established (e.g. hunting, fishing, wildlife propagation).

b) Potential Effects on the Resources

The trail should not be in a location where significant adverse impacts on natural resources cannot be prevented through proper siting and trail construction and maintenance. Utilizing proper design standards, trails should generally be located within existing upland travel corridors as much as possible

to avoid fragmentation of properties and habitat and should be located away from identified sensitive areas such as high-quality natural communities, wetlands, nesting areas, wild resources, scenic areas, and unique aquatic or terrestrial habitat. The sensitivity of the natural community in the area of use will need to be evaluated for potential impacts, such as invasive species introduction concerns, and noise and dust effects. Certain animal species and vegetation communities may be particularly vulnerable during certain seasons (e.g. ground bird-nesting season). Limits on the season of use may be warranted in some situations.

The potential for adverse impacts to adjacent off-trail areas, not just the trail itself, will be evaluated in case of unauthorized, off-trail use. Some indications of adverse impacts are erosion scars, severe rutting, washouts, streambank and wetland damage, and siltation. Whenever possible trails should be located away from waterways to minimize potential impacts and discourage inappropriate use. Stream and wetland crossings should only be permitted if other practicable alternatives are not available. State statutes and administrative rules must be complied with, and county zoning requirements should be complied with, to assure protection of lakes, streams, and wetlands, and consideration of the public interest associated with them. Federal permits are also required for certain wetland modifications (see table), and local land use ordinances should be considered.

c) Safety

Assess whether there are conditions that pose potential safety problems for trail users. Are there terrain features that pose potential hazards to trail riders, e.g., steep drop-offs, rocky outcroppings, unstable native tread surfaces? Can these potential hazards be minimized through trail construction or signing techniques or be avoided? Are there existing infrastructure

WATERWAYS AND WETLAND PROTECTION REQUIREMENTS (PARTIAL LIST)

ENVIRONMENTAL ISSUE	AUTHORITY	CONTACT
Waterway Crossings and Modifications	Chapter 30 Stats	DNR Water Management Specialist
Wetland Crossings and Modifications	NR103 (Chapter 281, Stats) Federal Clean Water Act, Section 404	DNR Water Management Specialist US Army Corps of Engineers
Stormwater and Grading	NR 216 (Chapter 283, Stats)	DNR Water Management and Wastewater Specialist
Shorelands and Floodplain	County Shoreland and Floodplain Zoning Ordinances Pursuant to Chapters NR 115, (Chapter 59, Stats) and NR 116 (Chapter 87, Stats)	County Zoning office Also check with local jurisdiction (township, village, city)

APPENDIX F: GUIDANCE FOR ALL-TERRAIN VEHICLE USE ON DEPARTMENT LANDS

situations that might pose safety concerns, e.g., necessity to cross roads, utilize highway rights-of-way or highway bridge structures to cross streams or rivers? Are there alternatives that can be sited or constructed at reasonable costs to avoid or minimize these situations, e.g., construction of a ramp to approach a highway or road-crossing at grade?

d) Social Considerations

Trails should be located to minimize impacts to other recreational uses, such as camping, hiking, wildlife viewing, hunting, or fishing that are already established on the property. ATVs may be compatible on larger properties where space is available to provide use without disruption to others. If potential conflicts exist with the proposed location, alternatives should be considered that minimize these conflicts, such as alternate locations, seasonal use, visual and sound buffers, and time-of-day restrictions. Existing appropriate recreational uses will generally have priority over new proposals if conflicts cannot be mitigated. Impacts to other property users, such as noise and dust, must be evaluated. An evaluation/summary of public opinion about the proposal must be considered.

e) Economic

Consider the trail's impact on the local economy. Identify opportunities to connect with communities, restaurants, lodging, and other facilities.

f) Cooperation

The degree of demonstrated local support and interest in cooperative efforts should be documented and an assessment of a potential sponsor's ability to develop, maintain, and insure the trail be made. A Memorandum of Understanding will be developed that outlines responsibility between a recognized club/unit of government and the Department to develop and operate trails on department lands. Local cooperators and their responsibilities should be identified.

g) Management/Administrative Criteria

- Evaluate existing level of staff and funding available to manage, maintain, and monitor this trail and MOU. Determine if clubs/units of government are willing to provide the necessary resources.

Insufficient resources may result in a determination by administration that the project is not feasible.

- Assess development costs and determine funding sources.
- Enforcement. An evaluation of enforcement resources is needed. Assess the need and availability of law enforcement

to patrol the trail. This could be either Department or local government personnel.

6. PROCEDURE FOR ATV TRAIL REQUESTS ON DEPARTMENT PROPERTIES

Manual Code #2527.9 outlines the policy for handling requests for ATV trails on Department properties. ATV trails that are being considered as part of an NR 44 master plan process or plan revision need to follow the substantive provisions of this guidance but not the procedure outlined in the manual code.

7. APPROVED ATV TRAILS

a) Monitoring

Regular and on-going monitoring of ATV trail tread and adjacent areas is imperative to detect and correct impacts while they are manageable, and before permanent degradation occurs or repair costs become prohibitive. The required semi-annual designated use area inspection may be insufficient to detect problems, and more frequent inspections may be needed.

b) Closure Authority

The Department has the authority to close Department land, by posted notice (NR 45.04) if necessary. Property managers should exercise that authority if issues of safety, resource damage, or other legitimate concerns arise until such time as the problem can be resolved. Lack of sufficient resources to maintain trails, unauthorized off-trail use, annual spring break-up and failure of cooperators to adhere to terms of MOU are valid reasons for closing trails. The ultimate closure authority lies with the regional director.

8. GLOSSARY

Intensive Use Area: An intensive use area is an area that is designated, usually by fencing or signage, for the use of ATVs. Riding opportunities may consist of riding courses and trails and associated support facilities (e.g., restroom facilities, ATV wash-down facilities, unloading ramps, and/or camping facilities). Intensive use areas are typically supervised and/or patrolled during hours of operation. Typically, an entrance fee is charged to make use of the riding opportunities. Riding courses and trails are actively managed and maintained.

Approved Plan: An approved plan can be one of the following: a property master plan or, where no master plan exists, a site plan on a 1:24,000 USGS topographical map, signed off through channels, or a plan resulting from a signed cooperative State Trail agreement.